## REMARKS

In the Office Action, the Examiner rejected claims 1-14 citing the publication entitled "Single-Layer Global Routing" (Sarrafzadeh). Applicant respectfully traverses.

While Sarrafzadeh discloses, generally, a "Density Algorithm" and a congestion map, Sarrafzadeh does not disclose or suggest many of the elements of the claimed invention.

For example, the Examiner asserts that the first paragraph of section IV of the paper (page 41, right column) discloses the following elements of claim 1:

1. dividing the datapath into pre-determined areas to define said given area;
2. calculating the mathematical expectations of full segments in the pre-determined direction for said given area in said datapath;
3. calculating the mathematical expectations of partial segments in the pre-determined direction for said given area in said datapath; and
4. summing the mathematical expectations which have been calculated to determine the probability that a wire path in the pre-determined direction will be contained in the given area within the datapath.

However, the paragraph identified by the Examiner does not specifically disclose or suggest these particular steps. Applicant respectfully asserts that to take the position that the broad disclosure of Sarrafzadeh of a congestion map and a Density Algorithm amounts to a teaching of the above-identified steps which are being specifically claimed amounts to hindsight. There are many court decisions which hold that using hindsight is improper. As early as 1891, the United States Supreme Court held that:

> Knowledge after the event is always easy, and problems once solved present no difficulties, indeed, may be represented as never having had any, and expert witnesses may be brought forward to show that the new thing which seemed to have eluded the search of the world was always ready at hand and easy to be seen by a merely skillful attention. But the law has other tests of the invention than subtle conjectures of what might have been seen and yet was not. It regards a change as evidence of novelty, the acceptance and utility of change as further evidence, even as demonstration . . . Nor does it detract from its merit that it is the result of experiment and not the instant and perfect product of inventive power. A patentee may be baldly empirical, seeing nothing beyond his experiments and the result; yet if he has added a new and valuable article to the world's utilities, he is entitled to the rank and protection of an inventor . . . It is certainly not necessary that he understand or be able to state the scientific principles underlying his invention, and it is immaterial whether he can stand a successful examination as to the speculative ideas involved.

Diamond Rubber Co. v. Consolidated Rubber Tile Co., 220 U.S. 428 , 435-36.

In view of the above remarks, it is respectfully requested that the Examiner's rejection of claim 1 be withdrawn, and that claim 1 and those claims which depend therefrom be allowed.

Should the present claims not be deemed adequate to effectively define the patentable subject matter, the Examiner is respectfully urged to call the undersigned attorney of record to discuss the claims in an effort to reach an agreement toward allowance of the present application.

Respectfully submitted,

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By: _____

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